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U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

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Gordon P. Eaton, Director

Reston, VA 20192

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For information, contact:

Joyce Ober, Commodity Specialist

Telephone: (703) 648-7717, Fax: (703) 648-7722

E-mail: [jober@usgs.gov](mailto:jober@usgs.gov)

Maria Arguelles, Statistical Assistant

Telephone: (703) 648-7990

E-mail: [marguell@usgs.gov](mailto:marguell@usgs.gov)

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

## SULFUR IN JULY 1997

During the month, production of combined Frasch and recovered elemental sulfur was 885,000 metric tons, according to the U.S. Geological Survey. July production was 4% higher than that of June 1997 and 3% higher than that of July 1996. Shipments of these combined products were 6% higher than those of June 1997.

Import and export data for July 1997 were not available at

the time of publication. Import/export data and apparent consumption for July 1997 will be published in the August 1997 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for June 1997 were 126,000 tons. Exports of sulfur, for the same period, were 2,000 tons. Imports of sulfuric acid for June 1997 were 138,000 tons; exports were 11,000 tons.

TABLE 1  
SALIENT SULFUR STATISTICS 1/

(Thousand metric tons)

Period	Production				Shipments, all sources
	Frasch	Petroleum 2/	Natural gas 3/	Total 3/	
1996	W	5,370	4,990 r/	10,400 r/	10,400
Jan.-July 1996	W	3,030	2,960	6,000	5,890
1996:					
July	W	433	427	860	832
August	W	468	432	900	917
September	W	440	401	841	872
October	W	466	412	878	885
November	W	481	354	835	858
December	W	484	413	897	949
1997:					
January	W	467	430	897	902
February	W	388	411	799	817
March	W	447	472	919	910
April	W	490	432	922	954
May	W	500	424	924	940
June	W	447	404 r/	851 r/	835 r/
July	W	480 p/	405 p/	885 p/	885 p/
Total	W	3,220	2,980	6,200	6,240

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."  
"Natural gas."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes a small quantity from coking operations.

3/ Includes data from Frasch producers.

TABLE 2  
U.S. IMPORTS OF SULFUR 1/

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries 2/	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1996:	1,090	31,000	467	21,200	1,730	61,600
Jan.-June 1996	600	18,100	202	9,450	900	33,900
1996:						
June	114	2,100	36	1,760	180	4,860
July	111	4,610	36	1,680	148	6,700
August	80	1,590	57	2,510	157	4,910
September	59	1,380	58	2,470	135	4,410
October	92	2,170	19 e/	826	111	3,110
November	81	1,740	40	1,750	155 e/	4,670
December	66	1,350	57	2,510	123	3,950
1997:						
January	74	1,440	60	2,730	134	4,360
February	82	1,870	41	3,220	122	5,290
March	83	1,620	61	2,550	159	5,150
April	84	1,740	21	989	105	3,360
May	87	2,110	21	1,000	108	4,390
June	88	1,560	37	1,840	126	4,780
Total	498	10,300	241	12,300	754	27,300

e/ Estimated.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

TABLE 3  
U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total 2/		
	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/
1996:	1,600	522	41,000	210	69	2,520	2,080	682	48,500
Jan.-June 1996	752	246	20,300	136	46	1,620	1,070	349	24,500
1996:									
June	113	37	2,670	21	7	160	140	46	3,460
July	106	35	2,770	21	7	86	132	43	3,210
August	127	41	3,260	11	3	176	138	45	3,620
September	156	51	3,760	19	6	70	195	64	4,160
October	144	47	3,690	--	--	--	161	53	3,890
November	166	54	3,900	10	3	79	223	73	4,330
December	146	48	3,360	13	4	496	167	55	4,860
1997:									
January	108	35	3,080	13	4	207	145	47	4,650
February	135	44	3,320	--	--	--	139	45	4,250
March	131	43	3,390	28	9	116	192	63	4,330
April	119	39	3,050	--	--	--	119	39	3,200
May	132	43	3,490	--	--	--	188	61	4,090
June	115	38	3,280	--	--	--	138	45	3,550
Total	740	242	19,600	41	13	323	921	300	24,100

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census.

TABLE 4  
U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value 2/	Quantity	Sulfur content	Value 2/
1996:	913	51,700	117	38	12,300
Jan.-June 1996	509	30,300	53	17	5,880
1996:					
June	124	4,990	8	3	785
July	62	3,160	9	3	978
August	139	7,280	12	4	1,090
September	36	1,910	12	4	1,080
October	92	3,760	12	4	1,440
November	59	3,510	10	3	869
December	16	1,810	9	3	1,020
1997:					
January	10	746	11	4	1,170
February	(3/)	15	7	2	834
March	10	856	10	3	1,030
April	3	290	7	2	931
May	3	659	8	3	941
June	2	333	11	4	930
Total	29	2,900	55	18	5,830

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Declared f.a.s. (free alongside ship) valuation.

3/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5  
U.S. CONSUMPTION OF SULFUR 1/

(Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1996:	9,460	1,730	11,200
Jan.-June 1996	4,490	900	5,390
1996:			
June	579	180	759
July	770	148	918
August	778	157	935
September	836	135	971
October	793	111	904
November	799	155 e/	954
December	933	123	1,060
1997:			
January	892	134	1,030
February	817	122	939
March	900	159	1,060
April	951	105	1,060
May	937	108	1,050
June	833	126	959
Total	5,330	754	6,080

e/ Estimated.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Calculated as shipments minus exports.

TABLE 6  
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,  
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

(Thousand metric tons)

District and source	July 1997 p/		June 1997 p/		Total 1997 2/		Year to date 1996	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	7	7	4	4	49	48	122	130
Natural gas	13	14	16	16	104	105	29	30
Total	20	21	20	21	153	153	151	159
PAD 2:								
Petroleum and coke	62	63	64	66	523	527	518	517
Natural gas	4	4	3	3	22	22	29	29
Total	66	67	67	69	545	549	547	546
PAD 3: 3/								
Petroleum and coke	290	300	274	257	1,910	1,910	1,790	W
Natural gas 4/	300	286	307 r/	316 r/	2,750	2,290	2,310 r/	W
Total 5/	590	586	581 r/	581 r/	4,160	4,210	4,100 r/	4,000
PAD 4 and 5: 6/								
Petroleum and coke	121	124	105	96	738	740	607	604
Natural gas	90	88	78	77	605	594	592 r/	578
California	105	109	88	79	604	607	476 r/	474
Total	211	212	183	173	1,340	1,330	1,200 r/	1,180
Grand total	885	885	851 r/	835 r/	6,200	6,240	6,000	5,890

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include revisions to prior months.

3/ Includes Puerto Rico and the U.S. Virgin Islands.

4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.

5/ Includes data from Frasch producers.

6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7  
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	1997			1996
	July	June	Year to date	Total
Production	10.40 p/	10.40 r/	10.70	10.40 r/
Shipments	10.40 p/	10.20 r/	10.80	10.40
Exports of sulfur	NA	0.02	0.06	0.91
Imports of sulfur:				
Canada	NA	1.07	1.00	1.09
Mexico	NA	0.45	0.49	0.47
Total	NA	1.53	1.52	1.73
Exports of H <sub>2</sub> SO <sub>4</sub>	NA	0.13	0.11	0.12
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	NA	1.40	1.49	1.60
Europe	NA	--	0.10	0.21
Total 2/	NA	1.68	1.86	2.08
Consumption: 3/				
Domestic sources	NA	10.10	10.80	9.46
Imports	NA	1.53	1.52	1.73
Total	NA	11.70	12.30	11.20
Sulfur export values 4/	NA	\$167	\$100	\$57
Sulfur import values: 4/				
Canada	NA	\$18	\$21	\$28
Mexico	NA	\$50	\$51	\$45
Average	NA	\$38	\$36	\$36
H <sub>2</sub> SO <sub>4</sub> export values 4/	NA	\$85	\$106	\$106
H <sub>2</sub> SO <sub>4</sub> import values: 4/				
Canada	NA	\$29	\$27	\$26
Europe	NA	--	\$8	\$12
Average	NA	\$26	\$26	\$23

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes other countries not listed.

3/ Because trade data was not available, July consumption was not determined.

4/ Average value per ton for most recent data available.